

In the Claims

1. (Currently Amended) An austenitic-ferritic stainless steel having a metal structure containing a ferrite phase and an austenite phase, the amount of (C + N) in the austenite phase being in a range from about 0.16 to about 2% by mass, and the volume percentage of the austenite phase being in a range from about 10 to about 85%, and having about 48% or larger total elongation determined by tensile test, wherein the steel satisfies:

$$\text{“Md}(\gamma) = -30 \sim 90$$

where,

$$\text{Md}(\gamma) = 551 - 462\text{C}(\gamma) - 462\text{N}(\gamma) - 9.2\text{Si}(\gamma) - 8.1\text{Mn}(\gamma) - 13.7\text{Cr}(\gamma) - 18.5\text{Mo}(\gamma) - 29\text{Ni}(\gamma) - 29\text{Cu}(\gamma),$$

and each component is of γ phase.

2. (Cancelled)

3. (Previously Presented) The austenitic-ferritic stainless steel according to claim 1, wherein the stainless steel comprises about 0.2% or less C, about 4% or less Si, about 12% or less Mn, about 0.1% or less P, about 0.03% or less S, about 15 to about 35% Cr, about 3% or less Ni, about 0.05 to about 0.6% N, by mass, and balance of Fe and inevitable impurities.

4. (Previously Presented) The austenitic-ferritic stainless steel according to claim 3, wherein the stainless steel comprises about 10% or less Mn, about 1 to about 3% Ni, by mass, and balance of Fe and inevitable impurities.

5. (Previously Presented) The austenitic-ferritic stainless steel according to claim 3, wherein the stainless steel comprises about 1.2% or less Si, about 2% or less Mn, about 1% or less Ni, by mass, and balance of Fe and inevitable impurities.

6. (Previously Presented) The austenitic-ferritic stainless steel according to claim 3, wherein the stainless steel comprises about 1.2% or less Si, about 4 to about 12% Mn, about 1% or less Ni, by mass, and balance of Fe and inevitable impurities.

7. (Previously Presented) The austenitic-ferritic stainless steel according to claim 3, wherein the stainless steel comprises about 0.4% or less Si, about 2 to about 4% Mn, about 1% or less Ni, by mass, and balance of Fe and inevitable impurities.

8. (Previously Presented) The austenitic-ferritic stainless steel according to claim 3, wherein the stainless steel further comprises one or more of about 4% or less Mo and about 4% or less Cu, by mass.

9. (Previously Presented) The austenitic-ferritic stainless steel according to claim 3, wherein the stainless steel further comprises about 0.5% or less V by mass.

10. (Previously Presented) The austenitic-ferritic stainless steel according to claim 3, wherein the stainless steel further comprises about 0.1% or less Al by mass.

11. (Previously Presented) The austenitic-ferritic stainless steel according to claim 3, wherein the stainless steel further comprises one or more of about 0.01% or less B, about 0.01% or less Ca, about 0.01% or less Mg, about 0.1% or less REM, and about 0.1% or less Ti, by mass.

12. (Currently Amended) A deep drawable austenitic-ferritic stainless steel comprising about 0.2% or less C, about 4% or less Si, about 10% or less Mn, about 0.1% or less P, about 0.03% or less S, about 15 to about 35% Cr, about 1 to about 3% Ni, about 0.05 to about 0.6% N, by mass, and balance of Fe and inevitable impurities, [[and]] having an austenite and ferrite two-phase structure, the amount of (C + N) in the austenite phase being in a range from about 0.16 to about 2% by mass, and the volume percentage of the austenite phase being in a

range from about 10 to about 85%, and having about 48% or larger total elongation determined by tensile test, wherein the steel satisfies:

$$\text{“Md}(\gamma)\text{=-30~90}$$

where,

$$\text{Md}(\gamma)\text{=551-462C}(\gamma)\text{-462N}(\gamma)\text{-9.2Si}(\gamma)\text{-8.1Mn}(\gamma)\text{-13.7Cr}(\gamma)\text{-18.5Mo}(\gamma)\text{-29Ni}(\gamma)\text{-29Cu}(\gamma),$$

and each component is of γ phase.

13. (Currently Amended) A punch-stretchable and crevice corrosion resistant austenitic-ferritic stainless steel comprising about 0.2% or less C, about 1.2% or less Si, about 2% or less Mn, about 0.1% or less P, about 0.03% or less S, about 15 to about 35% Cr, about 1% or less Ni, about 0.05 to about 0.6% N, by mass, and balance of Fe and inevitable impurities, the percentage of an austenite phase in the steel being in a range from about 10 to about 85% by volume, and having about 48% or larger total elongation determined by tensile test, wherein the steel satisfies:

$$\text{“Md}(\gamma)\text{=-30~90}$$

where,

$$\text{Md}(\gamma)\text{=551-462C}(\gamma)\text{-462N}(\gamma)\text{-9.2Si}(\gamma)\text{-8.1Mn}(\gamma)\text{-13.7Cr}(\gamma)\text{-18.5Mo}(\gamma)\text{-29Ni}(\gamma)\text{-29Cu}(\gamma),$$

and each component is of γ phase.

14. (Currently Amended) A corrosion resistant at a weld part austenitic-ferritic stainless steel comprising about 0.2% or less C, about 1.2% or less Si, about 4 to about 12% Mn, about 0.1% or less P, about 0.03% or less S, about 15 to about 35% Cr, about 1% or less Ni, about 0.05 to about 0.6% N, 0.005 to 0.5% V by mass, and balance of Fe and inevitable impurities, the percentage of an austenite phase of the steel being in a range from about 10 to about 85% by volume, and having about 48% or larger total elongation determined by tensile test, wherein the steel satisfies:

$$\text{“Md}(\gamma)\text{=-30~90}$$

where,

$$\text{Md}(\gamma)=551-462\text{C}(\gamma)-462\text{N}(\gamma)-9.2\text{Si}(\gamma)-8.1\text{Mn}(\gamma)-13.7\text{Cr}(\gamma)-18.5\text{Mo}(\gamma)-29\text{Ni}(\gamma)-29\text{Cu}(\gamma),$$

and each component is of γ phase.

15. (Currently Amended) A resistant to intergranular corrosion austenitic-ferritic stainless steel comprising about 0.2% or less C, about 0.4% or less Si, about 2 to about 4% Mn, about 0.1% or less P, about 0.03% or less S, about 15 to about 35% Cr, about 1% or less Ni, about 0.05 to about 0.6% N, by mass, and balance of Fe and inevitable impurities, the percentage of an austenitic phase of the steel being in a range from about 10 to about 85% by volume, and having about 48% or larger total elongation determined by tensile test, wherein the steel satisfies:

$$\text{Md}(\gamma)=-30\sim 90$$

where,

$$\text{Md}(\gamma)=551-462\text{C}(\gamma)-462\text{N}(\gamma)-9.2\text{Si}(\gamma)-8.1\text{Mn}(\gamma)-13.7\text{Cr}(\gamma)-18.5\text{Mo}(\gamma)-29\text{Ni}(\gamma)-29\text{Cu}(\gamma),$$

and each component is of γ phase.

16. (Previously Presented) The austenitic-ferritic stainless steel according to any of claims 12 to 15, wherein the stainless steel further comprises one or more of about 4% or less Mo and about 4% or less Cu, by mass.

17. (Cancelled)

18. (Previously Presented) The austenitic-ferritic stainless steel according to any of claims 12 to 15, wherein the stainless steel further comprises 0.1% or less Al by mass.

19. (Previously Presented) The austenitic-ferritic stainless steel according to any of claims 12 to 15, wherein the stainless steel further comprises one or more of about 0.01% or less B, about 0.01% or less Ca, about 0.01% or less Mg, about 0.1% or less REM, and about 0.1% or less Ti, by mass.

20. (Previously Presented) The austenitic-ferritic stainless steel according to any of claims 12 to 15, wherein the amount of (C + N) in the austenite phase is in a range from about 0.16 to about 2% by mass.